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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,606	07/05/2001	Chang-Hoi Koo	678-700 (P9856)	4060

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EXAMINER

AMINZAY, SHAIMA Q

ART UNIT PAPER NUMBER

2618

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/899,606	Applicant(s) KOO ET AL.	
	Examiner Shaima Q. Aminzay	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-11 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2, 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 3, 2006 has been entered.

Response to Arguments

Applicant's arguments filed July 3, 2006 with respect to claims 1-11 have been fully considered.

1. Arguments with respect to dependent claims 2-3 are moot in view of indicating that they are allowable subject matter and would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims as stated in the previous office action.
2. Arguments with respect to claims 4-11 are moot in view of indicating that they are allowable subject matter as stated in the previous office action.

3. Applicant's arguments with respect to claim 1 under 35 U.S.C.103(a) Rejection has been fully considered, but they are not persuasive.

The applicant's argued features in the claim 1 (page 2-4), i. e. "retransmitting data in a mobile communication system, comprising the steps of: determining whether an initial data block received from a transmitter has an error; estimating a current channel state and determining a retransmission frequency according to the estimated current channel state upon detecting an error in the initial data block; transmitting a retransmission request message of the initial data block together with the determined retransmission frequency to the transmitter; receiving data blocks retransmitted by the transmitter as many times as the retransmission frequency in response to the retransmission request message; determining whether the retransmitted data blocks have errors; and providing the received data blocks to an upper layer upon failure to detect errors from the received data blocks" to be established read upon Khan (Khan et al., US Publication 2001/0056,560) in view of Dorenbosch (Dorenbosch et al., US Patent 5,801,639). Khan discloses a method for retransmitting data in a mobile communication system, determining the error of the data block received, and the receiving data blocks retransmitted by the transmitter in response to the retransmission request message (*see rejection below*), however, Khan does not specifically teach "as many times as the retransmission frequency", Dorenbosch teaches in a related art dealing with retransmitting data in mobile communication

system the retransmitting as many times as the retransmission frequency (see *for example, column 4, lines 54-59*), and further, applicant argue that the reference fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "In the HARQType I, the "packet retransmission frequency" indicates how many times the transmitter will repeatedly transmit the same packet data as that transmitted during the initial transmission") are not recited in the rejected claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Khan and Dorenbosch are both analogous to the applicants teaching, that's why they do obviate. The rejection is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action

(a) Patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Khan (Khan et al., US Publication 2001/0056,560) in view of Dorenbosch (Dorenbosch et al., US Patent 5,801,639).

Regarding claim 1, Khan discloses a method for retransmitting data in a mobile communication system (*see for example, Figure 3B, paragraph [0001], lines 1-5, [0003], lines 1-4, [0030], lines 1-15, data transmission in a mobile communication system*), comprising the steps of: determining whether an initial data block received from a transmitter has an error (*see for example, paragraph [0014], lines 1-18, [0037], lines 1-25, determining the error of the initial data block received*); estimating a current channel state and determining a retransmission frequency according to the estimated current channel state upon detecting an error in the initial data block (*see for example, paragraph [0014], lines 1-18, [0037], lines 1-25, detecting error in data block and estimating a channel state and determining retransmission frequency*); transmitting a retransmission request message of the initial data block together with the determined retransmission frequency to the transmitter (*see for example, paragraph [0014], lines 1-18, [0016], lines 1-19, [0036], lines 1-8, [0037], lines 1-25, transmission of retransmit message and determining retransmission frequency*); determining whether the retransmitted data blocks have errors (*see for example, paragraphs [0014], lines 1-18, [0015], lines 1-7, [0016], lines 1-19, and [0037], lines 1-25, determining the*

retransmitted data block errors); and providing the received data blocks to an upper layer upon failure to detect errors from the received data blocks (see for example, paragraph [0006], lines 1-18, [0037], lines 1-25, and [0045], lines 1-18, received data blocks and error detect).

Khan does not specifically teach “as many times as the retransmission frequency”, however, Khan teaches receiving data blocks retransmitted by the transmitter in response to the retransmission request message (see for example, paragraph [0015], lines 1-7, [0016], lines 1-19, [0037], lines 14-25, [0039], lines 1-12, the transmitter retransmits the received data block in response to retransmission request message);

In a related art dealing with retransmitting data in mobile communication system (see for example, column 1, lines 6-8, lines 40-48, and column 6, lines 35-46), Dorenbosch teaches retransmitting as many times as the retransmission frequency (see for example, column 4, lines 54-59).

It would have been obvious to one of ordinary skill in the art at the time invention was made to included Dorenbosch’s reuse frequency with Khan’s measurement based automatic retransmission request system to provide an Automatic Transmission Request mobile communication system “that can determine the level of noise interference experienced by a selective call transceiver prior to transmitting a message” (Dorenbosch, column 1, lines 40-43).

Allowable Subject Matter

5. Claims 4-11 are allowed.
6. Claims 2-3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims

"A method for retransmitting data in a mobile communication system, comprising the steps of: determining whether an initial data block received from a transmitter has an error; estimating a current channel state and determining a retransmission frequency according to the estimated current channel state upon detecting an error in the initial data block; transmitting a retransmission request message of the initial data block together with the determined retransmission frequency to the transmitter; receiving data blocks retransmitted by the transmitter [as many times as the retransmission frequency] in response to the retransmission request message; determining whether the retransmitted data blocks have errors; and providing the received data blocks to an upper layer upon failure to detect errors from the received data blocks", "further comprising the step of measuring an average received power level of the initial data block and each of the received data blocks, and selectively combining only the data blocks having an average power level higher than or equal to a predetermined reference power level upon failure to detect errors" as disclosed in claims 1 and

2.

"A method for retransmitting data in a mobile communication system, comprising the steps of: determining whether an initial data block received from a transmitter has an error; estimating a current channel state and determining a retransmission frequency according to the estimated current channel state upon detecting an error in the initial data block; transmitting a retransmission request message of the initial data block together with the determined retransmission frequency to the transmitter; receiving data blocks retransmitted by the transmitter [as many times as the retransmission frequency] in response to the retransmission request message; determining whether the retransmitted data blocks have errors; and providing the received data blocks to an upper layer upon failure to detect errors from the received data blocks", "further comprising the step of measuring an average received power level of the initial data block and each of the received data blocks, and selectively combining only the data blocks having an average power level higher than or equal to a predetermined reference power level upon failure to detect errors", "further comprising the step of discarding the data blocks having an average power level lower than the reference power level" as disclosed in claims 1, 2 and 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 571-272-7874. The examiner can normally be reached on 7:00 AM -5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Shaima Q. Aminzay
(Examiner)

July 24, 2006

 7/24/06

QUOCHIEN B. VUONG
PRIMARY EXAMINER

Nay A. Maung
(SPE)